

The Rev. S. Isaacson read a paper on

THE ANCIENT TEMPLE AT ARBORLOWE,
DERBY.

The paper commenced by stating that the circular temples of the ancient Druids are universally allowed to be the most important of all the monuments having reference to the early history of our country; and, consequently, any researches calculated to throw light upon their origin or character, or which may bring them more prominently before the public, and thus lead the inquiring mind to a minuter investigation, cannot fail to be interesting to the Archaeological world. Though Arborlowe does not pretend to the magnificence of Abury or Stonehenge, it is still far too important to be allowed to repose under the incidental and scanty notices which it has hitherto received. With the assistance of a friend, Mr. Bateman, the author had succeeded in discovering the original deposit in the great barrow immediately adjoining the circle, which had hitherto defied the scrutiny of all previous excavators. The reverend author proceeded to give a history of circular temples, considered without reference to the British Isles, deducing their origin from the very earliest ages, and throughout all parts of the world. The altar under the hill, with the twelve pillars under the hill, erected by Moses, the twelve stones set up in the midst of Jordan by Joshua, and the twelve stones taken out of the Jordan and pitched in Gilgal, are striking illustrations of these temples of unhewn stone among the Israelites. The great stones or temples of the Druids in Britain, were as little worked as possible, and it is at least possible that the form was borrowed from the Phenicians or Tyrians, who preserved it in their religious structures wherever they went. In Greece and Rome circular temples were erected, and open at the top. Homer describes them; in Baruch we read of their construction in Assyria. It was not, therefore, for ignorance of the fine arts that Druidical temples were erected without pillars; regular architecture and sculpture were sedulously avoided in these erections. Magnificence was sought for in vastness and large masses of stone: in Abury and Stonehenge specimens of this Cyclopean architecture appear in all their colossal grandeur. Nor will the smaller temple of Arborlowe be found unworthy of attention, placed as it is at a remote distance from the eye of the ordinary traveller, and seldom witnessed except by those whose researches more immediately embrace such objects. The temple is surrounded by a large rampart, measuring 7 yards in height internally, and 6 externally; the fosse, which is on the inside, being 5 yards over at the bottom. The form is not strictly circular, but rather elliptical, or similar to a flattened sphere, the extreme diameter being 100 yards. The enclosed area is 60 yards in diameter, and the author had no doubt the number of stones originally amounted to thirty, which would harmonise with the ancient cycles. It is quite clear that these stones were never placed in an erect position, but laid on the bare surface of the rock at regular intervals. Probably the area was divided into twelve equal parts representing the months, so that the whole structure would constitute a calendar, consisting of 360 days, into which the year was originally divided. The two entrances to the temple were north and south, consisting of benches of earth across the fosse, on each side of which originally stood a large stone. In the centre is one very large mass of rock, 15 feet by 8, and nearly 3 feet thick, weighing probably 5 tons, and called the sacrificial stone, from a large basin, caused perhaps by exposure to the weather, in which the blood of the victim was poured. Near this are two other stones much broken; and probably a fourth existed. The idea of this being a Roman work is described by the reverend author as altogether preposterous, as it agrees with no known specimen of their erections; and the Danes and Saxons have still less claims to its paternity. In fact, the contents of the circle lately found will place its construction at least 500 years before the invasion of Cæsar. We must conclude our notice with the following remark:—"The position of the largest stone, immediately facing the east, renders it highly probable that the founders were sun worshippers; and the two other stones exhibit-

ing indisputable marks of having undergone the action of intense heat, it is not at all unlikely that on these were kindled the great fires with which the earliest inhabitants of the British Islands were accustomed, at the return of the equinoxes and solstices, to worship their god Belus or Baal, the Grecian Apollo."

Mr. Planché read a valuable paper "On the arms of Saer de Quincy, first Earl of Winchester, and on early armorial bearings, especially those termed 'honourable ordinaries.'" The excellent author considered the heraldic figures, entitled the ordinaries, had their origin in the necessity for strengthening the long kite-shaped shield, in use during the 11th century, and exhibited drawings of a variety of shields of that period, in which the forms of all but "the pile" were to be traced in the metal or wooden clamps or fastenings and defences of the shield. To the same origin he traced several other charges. Mr. Planche argued, that the symbolical characters attached to them were the inventions of later hands, and could not be traced higher than the 15th century.

INFLUENCE OF NEWLY-BUILT HOUSES
ON THE HEALTH OF THEIR OCCUPIERS.

OR, SUTRO'S REPLY.

SIR,—Having seen the two last numbers of your valuable journal, I feel called upon to consider, dispassionately, the objections raised by Mr. G. Robins against the article extracted from a medical journal under the above title. Of course the article was only intended for the medical public, but since you chose to insert it in your journal, and thus occasioned the reply (if I may so call it), I think it my duty to, enter fully into the writer's arguments, urged, I must say, in a most professional and gentlemanly manner, in which I should rejoice to see all scientific discussions carried on, though interest or fame may be affected.

I perfectly concur with the writer, that experience deserves greater appreciation in such cases than theory, and that nothing would be more dangerous than to sacrifice facts to speculation. But the question is, how far do theory and practice agree with each other in this point? If your correspondent never met with the pale anæmic face, wasted muscles, decrease of strength, sluggishness of all the functions (not sluggishness of the pulse), all consequent upon inhabiting a newly-erected residence, this only proves that he never placed persons in the early occupation of such dwellings, as are described as peculiarly injurious in the above article. Mr. Robins asks, "whether he has the charge of homicide upon himself for having constantly placed parties in the occupation of their dwellings within six months from the commencement thereof?" I ask, whether any charge of that kind can be inferred from the quoted article? Its whole purpose consists, in warning against the too early inhabiting newly-built houses without properly testing their fitness for occupation. As a proof of this I beg to refer to the following phrase, occurring before the proposal that a sanitary commission should be appointed to examine the houses before inhabitation:—"Should any house be dried before the time appointed, the proprietor might request the sanitary commissioners to examine it, when, if sufficiently dry, it might be inhabited."

Your correspondent shows himself by the careful tests he employs, that he must be satisfied of the dryness of a house before he places the occupier into it; and it can but be beneficial to point out and explain the injuries arising either from bad material of the house, or from exposure to its dampness, and to recommend the proper remedies against such evils. I must certainly admit, that new houses may be earlier occupied in this country than on the continent, inasmuch as the houses are mostly built here of burnt bricks, which contain and attract the smallest proportion of humidity, and thus occasion the least dampness. This may account for the less frequent maladies caused in this country by the above influences. I need not enter into the practical points mentioned, and the theoretical points doubted (but not disproved). By-the-by, I could not find the expression, "floating particles of lime." The phrase referred to, runs thus: the following foreign substances are

mixed with the air (speaking of newly built and not yet dried houses, as particles of lime which have been proved beyond doubt to exist in the atmosphere of new habitations, being suspended by the evaporation of the moisture. As regards the injury of fresh paint (for the question only turns upon undried paint), I have unfortunately had myself an opportunity very lately of witnessing serious consequences. A talented young friend of mine, to please an acquaintance, took a newly-painted room in his house; when I saw him after three weeks, I found him suffering with a severe and most obstinate cough. His removal was ordered, but the cough having resisted the most energetic remedies, he was advised by his medical attendants to try the effects of the bath. Without much pain, and without great fever, his lungs are so intensely irritated, that it would be sanguine to expect his complete recovery. Apologizing for intruding these hasty lines on your valuable space, I am, Sir, &c.,

SIGISMUND SUTRO, M.D.

3, Great Marlborough-street,
Aug. 7th, 1845.

SUSPENSION BRIDGES.

SIR,—I am not disposed to enter into a controversy with Mr. Dredge upon the subject of suspension bridges, even if I had the leisure and ability so to do; but still I cannot refrain from offering a few more remarks on the subject. I feel particularly obliged (as I am sure the rest of your readers must do) for the diagrams and explanatory matter contained in your 128th number; the principles of which are so clearly set forth and exemplified in a supplement to "Hoeking's Treatise on Bridge Building," that the matter is not altogether new to me.

Mr. Dredge, in reply to your remarks with reference to suspension and compression bridges, was peculiarly unfortunate in his choice of a subject for illustration, because the works that failed at Derby and Ashton were in course of construction, and incomplete, therefore it was unfair to take advantage of such a circumstance, and arrive at such conclusion; but Mr. Dredge having a principle and theory of his own, does not rest his argument on such futile ground, but rather, as I before understood, against the principle of compression bridges generally. Suspension and compression bridges are totally different in principles, in their mode of construction and composition; and I should be sorry if and remark of mine should have a tendency to injure an invention that may be said to be "in its infancy." But whatever opinion may be entertained of its usefulness and general applicability, I do not think sufficient evidence has been produced in its favour for us totally to abandon a principle which is generally acknowledged to be, and has proved itself efficient; and which has received the impress of time and experience, and been sanctioned and adopted by every professional man of eminence in this and other countries, both in the past and present age. As we very rarely hear of bridges of fixed principles falling after they have once been completed, the accidents above alluded to came very opportunely to fill up the vacuum there would otherwise have been in Mr. Dredge's argument. As so much has been said upon the subject, we may as well inquire if no failure has attended suspension bridges? I think I can enumerate many instances; one in India, the Broughton, the Montrose bridge, occasioned by the passage of troops; one at Murpeth, Northumberland, from a crowd of persons returning from a fair; the Yarmouth bridge, and others (which shew the effect produced by percussion, &c., on iron), and generally attended with a serious loss of life. The Menai and Montrose bridges, the Brighton chain pier, &c., have also been partially destroyed by the violent action of the elements or other causes.

A Madras paper, which seems to be well informed upon the subject, observed with reference to the fall of the bridge in India, "that the severe strain or vibration, occasioned by the measured tread of a body of military is indeed so trying to these structures, that it is considered by engineers that they will in this case bear but one-eighth part of the weight they might otherwise be safely loaded with. We have numerous examples of bridges of masonry, many of which have withstood the